

Amendments to the Claims

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims

1. (Currently Amended) A computer system including a first computer node and a second computer node connected to said first computer node, comprising:

a first storage area for storing data records;

a first processor for storing data records to said first storage area asynchronously with said second computer node with a free time interval;

a transmitter for sending the data records stored in said first storage area;

a second storage area for storing the data records copied from said first storage area;

a receiver for requesting said transmitter to send the data records stored in said first storage area, receiving the data records from said transmitter and storing the data records to said second storage area; and

a second processor for designating a record group, which includes at least a part of the data records, to be read from said

first storage area in a free time interval asynchronously with said first processor and for letting said receiver send a request to said transmitter,

wherein said transmitter reads the record group designated by said request sent from said receiver and sends the record group to said receiver.

2. (Original) A computer system as claimed in claim 1, wherein said first storage area is allocated within said first computer node.

3. (Original) A computer system as claimed in claim 1, wherein said second storage area is allocated within said second computer node.

4. (Currently Amended) A computer system as claimed in claim 1, wherein said first storage area is allocated within an external storage device connecting with said first computer node and said second computer node.

5. (Currently Amended) A computer system as claimed in claim 1, wherein said second computer node is provided with a timer for starting said second processor with a constant time interval to

read the data records to said second storage area from said first storage area.

6. (Currently Amended) A computer system as claimed in claim 1, wherein said first processor stores said data records to said first storage area by giving an identifier number indicating the sequence of storing of said data records, said first storage area includes a plurality of entries to store the set of said identifier number and the data records to read the data records from said entry in the inverse direction to the direction to write the data records to said entry with said first processor, and said second processor refers to the data records in said first storage area copied to said second storage area in order to determine whether the relevant data records are correct or not depending on said identifier number.

7. (Currently Amended) A computer system as claimed in claim 6, wherein said first processor writes the identifier number of the relevant data records after having written said data records and said second processor determines that the relevant data records are correct when said identifier number of the data read to said second storage area has continuity but the relevant data

records are incorrect when said identifier number does not have continuity.

8. (Currently Amended) A computer system as claimed in claim 1, wherein said first processor further includes an error checking code generator for generating an error checking code for said data records to write said data records and said error checking code to said first storage area and said second processor checks an error, with said error checking code, of the data records read to said second storage area and determines that the relevant data records are correct when no error is checked or incorrect when an error is checked.

9. (Currently Amended) A computer system as claimed in claim 8, wherein said first storage area includes a plurality of entries for storing a set of said error checking code and the data records to read the data records in the inverse direction to the direction to write the data records to said entry with said first processor.

10. (Currently Amended) A computer system connecting a first computer node and a second computer node, wherein:

said first computer node comprises a first storage area to store a data record, a first processor to store said data record

to said first storage area asynchronously with said second computer node in a desired time interval and a data transmit request generator to generate a data transmit request for transmitting said data record of said first storage area to said second computer node in a desired time interval, a transmitter to transmit the data record in said first storage area to said second computer node according to said data transmit request τ_i and

said second computer node comprising a second storage area to store the data record copied from said first storage area and a second processor to refer to the data record of said second storage area asynchronously with said first computer node in the desired time interval,

wherein transmitting of the data record in said first storage area to said second computer node is performed without intervention of said first and second processors ~~computer nodes~~ once the transmitting has been started.

11. (Currently Amended) A data transfer method of a computer system including a first computer node having a ~~computer~~ first processor and a first storage area, ~~and a second computer node having a second processor~~ computer and a second storage area and a communication means in which a program operating on the second computer node can refer to a data record stored in the first storage

area on the first computer node through copying of said data record into in the second storage area on said second computer node by designating said data record of said first storage area, ~~wherein the copying is performed without intervention of said first and second computers once the copying has been started,~~ comprising the steps of:

storing the data record to said first storage area in a desired time interval during operation on said first computer node; and

referring to the designated data record, through the copying into in said second storage area, of said first storage area using said communication means in a desired time interval during operation on said second computer node,

wherein the copying is performed without intervention of said first and second processors once the copying has been started.

12. (Currently Amended) A data transfer method of a computer system including a first computer node having a first processor computer and a first storage area, ~~and~~ a second computer node having a second processor computer and a second storage area, and a communication means in which a program operating on the first computer node can directly store data formed of one or more records

of said first storage area to the second storage area of the second computer node, ~~without intervention of said first and second computers once the copying has been started,~~ comprising the steps of:

storing the data formed of one or more records in said second storage area using said communication means in a desired time interval during operation on said first computer node; and

referring to said data in the second storage area in the a desired time interval during operation on said second computer node,

wherein said program operates without intervention of said first and second processors once the direct storing has been started.

13. (Currently Amended) A data transfer method of a computer system including a first computer node having a first computer and a first processor, ~~and~~ a second computer node having a second computer and a second processor, ~~and~~ a first communication means in which a program operating on the first computer node can store data to a first storage area in an external storage device, and a second communication means in which a program operating on the second computer node can refer to the data in the first storage area by copying such data to the second storage area on said second

computer node by designating the data in said first storage area;
~~wherein storing and copying of the data are performed without~~
~~intervention of the first and the second computers,~~ comprising:

a first step for storing data formed of one or more records ~~to~~ in said first storage area in a desired time interval using said first communication means during operation on said first computer node; and

a second step for referring to the designated data in said first storage area by copying such data to said second storage area using said second communication means in ~~the~~ a desired time interval asynchronously with said first step during operation on said second computer node,

wherein storing and copying of the data are performed
without intervention of the first and second processors of the
computer nodes.

14. (Currently Amended) A data transfer method as claimed in claim 11, further comprising:

a step in which said first storage area includes a plurality of entries wherein a set of identifier number and data record is stored, operates on said first computer node, writes said identifier number of the relevant data record after writing said data record and then reads said data record from said entry in the

inverse direction to the direction to write data record to said entry; and

a step for referring to the data in said first storage area copied to said second storage area and determining that the relevant data record is correct when said identifier number of the data read to said second storage area has continuity or and that the relevant data record is incorrect when said identifier number does not have continuity during operation on said second computer node.

15. (Currently Amended) A data transfer method as claimed in claim 11, comprising:

a step in which said first storage area includes a plurality of entries to which a set of the error checking code and data record is stored, operates on said first computer node, writes said data record and its error checking code to said first storage area and reads the data record from said entry in the direction identical to the direction to write data record to said entry; and

a step for checking an error with said error checking code for the data read to said second storage area and determines that relevant data record is correct when no error is detected or is incorrect when an error is checked during operation on said second computer node.